

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA,	:	CRIMINAL ACTION
	:	No. 12-393-01
Plaintiff,	:	
	:	
v.	:	
	:	
CHRISTOPHER MCDANIELS,	:	
	:	
Defendant.	:	

M E M O R A N D U M

EDUARDO C. ROBRENO, J.

June 11, 2014

**I. INTRODUCTION**

This memorandum addresses the motion of Defendant Christopher McDaniels ("Defendant") to strike the testimony of handwriting expert Lorie Gottesman. Ms. Gottesman was called as a witness by the Government at a sentencing hearing on January 30, 2014.

Defendant pleaded guilty to one count of bank robbery in violation of 18 U.S.C. § 2113(a) and 2, based on Defendant's participation in an incident occurring on April 20, 2012. At the sentencing hearing, the Government offered Ms. Gottesman's expert testimony for the purpose of proving that Defendant committed five additional bank robberies in late 2011, and early 2012, and that this uncharged criminal conduct justifies an upward departure at sentencing. Based on Ms. Gottesman's

testimony that certain handwritten notes used during the five bank robberies were created by Defendant, the Government contends that Defendant committed the other five robberies. Defendant, through counsel,<sup>1</sup> has moved to strike this expert testimony. See Mot. Strike Test. of Handwriting Expert Witness Lorie Gottesman, ECF No. 77.

## **II. PROCEDURAL HISTORY**

On August 2, 2012, a grand jury sitting in the Eastern District of Pennsylvania returned an indictment charging both Defendant and codefendant Ali Morris<sup>2</sup> with one count of bank robbery and aiding and abetting in violation of 18 U.S.C. §§ 2113(a) and 2.

On September 20, 2012, Defendant appeared before this Court and entered an open plea of guilty to Count One of the Indictment.

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<sup>1</sup> Defendant was previously represented by David Kozlow, Esq., and Elizabeth Toplin, Esq., of the Federal Community Defender Office for the Eastern District of Pennsylvania ("Federal Defenders"). Ms. Toplin represented Defendant at the sentencing hearing. After the hearing, it became apparent that the Federal Defenders had a conflict because another Federal Defender client was a possible government witness in this case. On that basis, the Federal Defenders moved to withdraw, and Carina Laguzzi, Esq., was appointed to represent Defendant. Ms. Laguzzi has filed all subsequent memoranda for Defendant in the case.

<sup>2</sup> Ali Morris pleaded guilty on October 12, 2012 to an identical charge of one count of bank robbery. See Gov't Sent. Mem. for Ali Morris, ECF No. 57 (Case No. 12-393-02). Mr. Morris was sentenced on February 12, 2014, to 2 years' imprisonment, three years supervised release, and a special assessment of \$100.

After numerous continuances, a sentencing hearing<sup>3</sup> in this case was held on January 30, 2014. At this hearing, the Government presented the testimony of Ms. Gottesman as an expert witness in the area of handwriting analysis. Ms. Gottesman testified regarding her qualifications as a handwriting expert, which include her educational background, employment history, training, and professional associations. Ms. Gottesman then proceeded to testify as to her examination of six demand notes collected from the April 20, 2012 bank robbery and the five uncharged bank robberies as well as handwriting samples collected from Defendant. This testimony is described in detail below.

On February 28, 2014 Defendant's new counsel, Ms. Laguzzi, filed a motion to strike the testimony of Ms. Gottesman (ECF No. 77). The Government filed a Response in Opposition to the Motion to Strike on April 4, 2014 (ECF No. 84).

### **III. MS. GOTTESMAN'S EXPERT TESTIMONY AND REPORT**

Ms. Gottesman prepared an expert report, labeled Government Exhibit 21 ("Gottesman Report"), which summarized her

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<sup>3</sup> At the hearing, the parties agreed to several stipulations, including the fact that FBI agents collected in each robbery a "demand note" (a piece of paper that the perpetrator of each robbery had presented to bank employees with written instructions and demands,) and that these demand notes had been taken to the FBI forensic lab in Quantico Virginia. See Jan. 30, 2014, Sentencing Hr'g Tr. 8:1-8:24, ECF No. 71.

handwriting analysis of the six demand notes and the writing samples collected from Defendant. Essentially, Ms. Gottesman's analysis involved a comparison of the six demand notes (the "question" documents) and the writing samples from Defendant (the "known exemplars").

Ms. Gottesman described an analytical methodology used in making these comparisons known as the "ACE-V methodology," standing for "Analysis, Comparison, Evaluation and Verification." See Sentencing Hr'g Tr. 10:23-25. At the hearing,

Ms. Gottesman explained that the first step in this methodology is to "examine the items, questioned and known, to determine if they are original writing or copies, if they're . . . freely and naturally prepared with no signs of distortion, [and to] look at the characteristics of the writing," such as "formation of the letters, the beginning and ending strokes of the letters, the slant of the writing, the height relationship between various letters, [and the] spacing between letters and also between words." Sentencing Hr'g Tr. 11:1-10. Ms. Gottesman did not explain in her testimony what specific actions are taken in the next three steps of the ACE-V methodology. In her expert report, however, these steps are described in greater detail.

"Comparison," the second ACE-V step, is described as consisting of a "side-by-side comparison of [known and question] items," where "the numerous characteristics exhibited in the

writing between the items are compared to determine the similarities, differences, and limitations, if present."

Gottesman Report 4.

"Evaluation," the third ACE-V step, is described as the "formulation of a conclusion based on the significance and combination of the characteristics observed during the comparison and any limitations, if present." Gottesman Report 4. At this stage the expert may reach one of five conclusions: (1) "identification" (items prepared by same writer), (2) "may have" (some indications that items were prepared by same writer, but less definitive), (3) "no conclusion" (cannot determine if items were written by same writer or not, due to limitations in examination), (4) "may not have" (indications that items may have been prepared by different authors, less definitive), and (5) "elimination" (items prepared by different writers).

Gottesman Report 4.

"Verification," the fourth ACE-V step, is described as ensuring that the "appropriate examinations have been conducted, that the examiner's conclusions are accurate and consistent with technical notes and are within the limits of the discipline, [that] there is supporting data, and [that] all records conform to Laboratory standards." Id.

At the hearing, Ms. Gottesman did not describe taking the specific actions described in the ACE-V methodology in her

comparison of the six demand notes and known exemplars. Instead, Ms. Gottesman's presentation consisted of illustrating specific characteristics in each of the six question documents that also appeared in some of the known exemplars. See Sentencing Hr'g. Tr. 20:7-21:5 (Q-1 demand note); id. 21:10-22:10 (Q-2 demand note); id. 22:11-22 (Q-4 demand note); id. 22:23-23:23 (Q-6 demand note); id. 23:24-24:12 (Q-7 demand note); id. 24:13-25:7 (Q-8 demand note). Ms. Gottesman noted two to three characteristics or formations that appeared both in the question document and in known writing samples from the Defendant.

After this discussion, Ms. Gottesman stated her determination, to a reasonably degree of certainty, that Defendant, the writer of the known exemplars, "prepared the questioned writings" provided (Q-1, Q-2, Q-4, Q-6, Q-7, Q-8). Sentencing Hr'g Tr. at 28:2-4.

#### **IV. DEFENDANT'S MOTION TO STRIKE**

Defendant argues that Ms. Gottesman's expert testimony failed the requirement for reliability under Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993), and Federal Rule of Evidence 702, because Ms. Gottesman failed to demonstrate that her testimony is "the product of sound scientific methodology derived from the scientific method." Mot. Strike ¶ 2. Defendant cites as evidence of Ms. Gottesman's flawed methodology the fact

that Ms. Gottesman "testified that she had no error rate, used a subjective analysis, and did not provide her opinion as an expert to a degree of scientific certainty." Id. ¶ 2.

Additionally, Defendant criticizes Ms. Gottesman's discussion of specific characteristics in particular question documents.

First, Defendant argues that Ms. Gottesman's reliance on a similar letter formation in both a question document and in a small number of the known writing exemplars is a flawed and non-scientific methodology. Defendant suggests that this methodology was flawed because Ms. Gottesman does not account for how often a particular formation did not appear in the pool of known exemplars. Similarly, Defendant argues, Ms. Gottesman does not address why the appearance of a similar formation in a question document and a small percentage of the known writing samples was strong evidence of a shared author. See id. ¶ 6 (citing Sentencing Hr'g Tr. at 37-38) (criticizing the fact that Ms. Gottesman did not explain how many times a distinctive letter "A" seen in Q-3 also appeared in the known writing exemplars); id. ¶ 10 (noting that Ms. Gottesman did not know how many times the capitalized formation "hurry," seen in Q-4, appeared in the known exemplars).

Defendant also argues that Ms. Gottesman's admission (that some of the identifiable formations relied on in her testimony are fairly common) diminishes the evidentiary weight of a

characteristic appearing in both a question document and a small number of known exemplars. See id. ¶¶ 7, 9 (noting Ms. Gottesman's example that a connected "o" and "m" appear in both a question document and exemplars).

Lastly, Defendant takes issue with the fact that Ms. Gottesman did not provide information about how many dissimilarities existed between the known exemplars and each question document.

Defendant argues that these omissions and cherry-picked similarities are evidence of a lack of sound scientific methodology, and for this reason Ms. Gottesman's expert testimony is unreliable, and thus inadmissible, under the standard provided by Rule 702 and Daubert.

#### **V. GOVERNMENT'S RESPONSE IN OPPOSITION**

The Government responds to Defendant's motion to strike Ms. Gottesman's testimony by emphasizing the strength of Ms. Gottesman's qualifications, the general admissibility of handwriting analysis in the Third Circuit, and the reliability of the particular methodology used in this case.

The Government first characterizes the prevailing standard for admission of expert testimony, under Rule 702 and Daubert, as a "liberal standard of admissibility" meant to restrict the admission of "junk science." See Resp. Opp'n 5, ECF No. 84. More



specifically, the Government argues that the requirement for “reliability” under Daubert is essentially that an expert’s opinion be based on “good grounds,” meaning that it is “based on the methods and procedures of science.” Id. (citing In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 744 (3d Cir. 1994) (“Paoli II”). Additionally, the Government asserts that the issue of reliability of such expert testimony is understood in the Third Circuit to go “more to the weight more than the admissibility of [such] evidence.” Id. (citing United States v. Velasquez, 64 F.3d 844, 849 (3d Cir. 1995)).

Next, the Government cites case law in the Third Circuit illustrating that, generally, expert testimony on handwriting analysis has been found admissible and sufficiently reliable under Rule 702. Id. at 7 (citing Velasquez, 64 F.3d at 851). The Government also defends Ms. Gottesman’s specific qualifications in this case. Id. at 9.

Lastly, the Government asserts that Ms. Gottesman’s opinion was supported by a “credible scientific methodology.” Id. at 11. The Government cites a similar case in which the Third Circuit found a handwriting expert’s methodology sufficiently reliable to be admissible. Id. at 12 (citing Velasquez 64 F.3d at 850-51). The Government argues that Defendant’s criticisms about the unreliable nature of Ms. Gottesman’s methodology, (the lack of error rates or degree of scientific certainty, and the

"subjective" nature of such analysis) are misplaced, as these same characteristics are present in the handwriting analysis in Velasquez, where a similar methodological approach (identify characteristics, compare, draw conclusions) was used. Id. at 13.

The Government's response does not directly defend Ms. Gottesman's application of a scientifically sound methodology in reaching the conclusions contained in her expert report and testimony.

While the Gottesman report describes a sound scientific method (the ACE-V method), Defendant's argument appears to be that Ms. Gottesman did not follow that methodical approach. In defense of Ms. Gottesman's actual application of the ACE-V method, the Government states that "the few specific examples that she chose to illustrate in how she arrived at her opinion are not exhaustive of the consistencies she found between the exemplars and the [question] documents." Id. at 15-16. Nowhere in the Government's response or in Ms. Gottesman's expert report, however, appears a more extensive account of the similarities and differences between each question document and the known exemplars, or an explanation of the balancing process that Ms. Gottesman was required to engage in to reach a conclusion under step 3 of the ACE-V method.

## **VI. ANALYSIS**

The probative question in this case is whether Ms. Gottesman's application of the ACE-V methodology is sufficiently reliable to be admissible.<sup>4</sup> In making a determination of admissibility, the Court relies upon the standards of reliability laid down by Rule 702 and the teachings of Daubert.

Several courts have considered the admissibility of handwriting analysis based on the reliability of the methodology used by the testifying expert. In such cases, the methodology, while not identical in every case, follows a common structure involving : (1) examination of both a "question" and "known" document to verify that each is identifiable (having sufficient writing and individual characteristics to permit identification); (2) comparison of the identifiable characteristics of the two documents (including "slant of the writing, shape of the letters, [and] letter connections"); and (3) weighing the evidence, considering both similarities and differences, to determine whether or not there is a match. Velasquez, 64 F.3d at 846 n.3. This last step usually involves making a determination along a continuum from a definite positive match to definitive negative match. Id.; see also

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<sup>4</sup> There does not appear to be a serious contention that either Ms. Gottesman's qualifications were insufficient or that handwriting analysis, as a general matter, lacks sufficient reliability. Though Defendant raised the latter point at the time of the hearing, see Sentencing Hr'g Tr. 45, it appears that he has abandoned it in the Motion to Strike.

United States v. Mornan, 413 F.3d 372, 376 (3d Cir. 2005);  
United States v. Gricco, Cr. No. 01-09, 2002 WL 746037 \*3 (E.D.  
Pa. 2002).

The ACE-V methodology described by Ms. Gottesman in her expert report, and briefly mentioned in her testimony, appears to follow the same steps described above in Velasquez. What is lacking, however, is clear evidence that Ms. Gottesman actually complied with Steps 2-4 of this methodology in the preparation of her expert report and testimony.

As to ACE-V step 2 ("Comparison"), Ms. Gottesman fails to provide evidence that she comprehensively compared the characteristics shared and not shared between each set of known and question documents. Only a few similarities between each pair are listed in the testimony, and no differences are listed. While surely Ms. Gottesman did not need to provide an exhaustive illustration of every characteristic that was matched between the known writing sample and each of the six question documents, it is troubling that Ms. Gottesman's five-page report also fails to include a more comprehensive description of the specific characteristics that matched, and the specific dissimilarities, if any, present in each side-by-side comparison.

As to step 3 ("Evaluation"), Ms. Gottesman's testimony and report fail to demonstrate how she conducted the balancing of

identifiable characteristics shared and not shared between the known writing sample and each question document.

As to step 4 ("Verification"), Ms. Gottesman fails to provide any evidence in her testimony or expert report of how the requirements of this step were met.

## **VII. CONCLUSION**

The Third Circuit has held handwriting analysis and the ACE-V methodology to be generally reliable and scientifically sound, as required under Rule 702 and Daubert. Ms. Gottesman, however, fails to provide evidence that her expert opinion in this case derived from a proper application of the ACE-V methodology, rather than reliance on specific similarities between "known" and "question" documents. The Court finds, based on the evidence presently on the record, that Ms. Gottesman's testimony is inadmissible because the Government has not met a showing of sufficient reliability.<sup>5</sup>

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<sup>5</sup> At the sentencing hearing, Ms. Gottesman also offered limited testimony about the results of entering the question documents into the "Bank Robbery Note File," a computer database used by the FBI to compare words, and phrases from demand notes collected throughout the country. See Sentencing Hr'g Tr. 28:22-25. Ms. Gottesman stated that this computer program found associations between the different question documents based on the wording contained in each. See Sentencing Hr'g Tr. 29:9-24.

Ms. Gottesman referred to this evidence only briefly in her report and testimony, for the apparent purpose of corroborating the conclusions of her handwriting analysis. Defendant did not

Defendant's motion to strike Ms. Gottesman's expert testimony will therefore be granted.

An appropriate order follows.

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specifically object to Ms. Gottesman's testimony regarding the Bank Robbery Note File at the time of the sentencing hearing, and did not refer this evidence in his motion to strike. In its "gatekeeping capacity," the Court finds that Ms. Gottesman failed to provide a foundation or sufficient indicia of reliability as to this evidence to support its admissibility. Fed. R. Evid. 702. Accordingly, the Court construes Defendant's motion to strike Ms. Gottesman's testimony to include her limited discussion of the Bank Robbery Note File.